

Title (en)

Cleaning device and system for vehicle-mounted optic surface and vehicle-mounted optic sensor with cleaning device

Title (de)

Reinigungsvorrichtung und System für einen fahrzeugmontierten Sensor mit optischer Fläche und fahrzeugmontierter optischer Sensor mit Reinigungsvorrichtung

Title (fr)

Système et dispositif de nettoyage pour surface optique montée sur un véhicule et capteur optique monté sur véhicule avec le dispositif de nettoyage

Publication

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Application

EP 14382193 A 20140527

Priority

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Abstract (en)

A first aspect of the invention refers to a cleaning device (10) for cleaning a vehicle-mounted optic surface (2), comprising a housing (11), the housing (11) comprising an opening (12) adapted to fit an optic surface (2), a fluid inlet (13) arranged to take in washer fluid, an at least one fluid discharge port (22) arranged to discharge washer fluid onto the optic surface (2), a first passage (23) in fluidic communication with the fluid inlet (13) and the at least one fluid discharge port (22) so as to guide the washer fluid from the fluid inlet (13) towards the at least one fluid discharge port (22) and a protruding part (20) that substantially surrounds the opening (12) so as to define an inner wall (21). The invention also refers to a cleaning system and to a vehicle-mounted sensor (1) comprising an optic surface (2) and a cleaning device (10).

IPC 8 full level

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CPC (source: EP US)

B60S 1/0848 (2013.01 - EP US); **B60S 1/52** (2013.01 - US); **B60S 1/528** (2013.01 - EP US); **B60S 1/56** (2013.01 - EP US); **B60S 3/04** (2013.01 - US)

Citation (applicant)

JP 2013006481 A 20130110 - ASMO CO LTD

Citation (search report)

- [XAI] FR 2681031 A1 19930312 - PEUGEOT [FR], et al
- [XI] EP 1726498 A1 20061129 - VALEO VISION [FR]
- [X] US 2014060582 A1 20140306 - HARTRANFT EVAN [US], et al
- [AD] JP 2013006481 A 20130110 - ASMO CO LTD
- [A] WO 0051745 A1 20000908 - MCCORD WINN TEXTRON INC [US], et al

Cited by

US2016272163A1; CN107298074A; FR3047458A1; US2016264064A1; US10399509B2; EP3717953A4; WO2017137277A1; US10350647B2; US10761319B2; US11889171B2; US10432827B2; US11140301B2; US11312337B2; US10293794B2; WO2021202837A1; US10328906B2; US11518346B2; US10525937B2; US10894275B2; US11472375B2; EP3224093B1; WO2016083317A1

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Designated extension state (EPC)

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EP 2949521 A1 20151202; **EP 2949521 B1 20190724**; CN 105128826 A 20151209; CN 105128826 B 20190618; JP 2015224028 A 20151214; JP 6576686 B2 20190918; US 10144395 B2 20181204; US 2015344001 A1 20151203

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